

REMARKS

Rejections Under 35 USC §102 and 35 USC §103

Claims 77-83 and 85 have been rejected under 35 USC §102(b) as being anticipated by Luthi et al. (US Patent No. 4,329,642).

Claim 84 has been rejected under 35 USC §103(a) as being unpatentable over Luthi et al. (US Patent No. 4,329,642) as applied to claim 77, and further in view of Malhi et al. (US Patent No. 5,006,792).

The rejections under 35 USC §102 and 35 USC §103 are traversed. However, the claims have been amended to emphasize features that are not disclosed or suggest by the prior art. In addition, the title has been amended to be more descriptive of the claimed subject matter.

Further, non-elected claims 61-76 have been canceled from the present application. However, Applicant reserves the right to file the non-elected canceled claims in a separate divisional application.

Summary of the Invention

Claims 77-85 are directed to a contact 14C (Figure 4A) for making an electrical connection with a component contact 16 (Figure 4B) on a semiconductor component 18 (Figure 3B). The contact 14C (Figure 4A) includes a substrate 12 (Figure 4A) having a recess 20C (Figure 4A), a plurality of cantilevered leads 22C (Figure 4A) on the recess 20C (Figure 4A), a support member 21C (Figure 4A) attached to the leads 22C (Figure 4A), and a projection 37 (Figure 4B) on the support member 21C (Figure 4A).

Argument

A proper 35 USC §102 rejection requires that each and every limitation of the claimed invention be disclosed in a single prior art reference. In addition, the reference must be enabling and describe the applicant's claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention. In re David C. Paulsen, 30 F.3d 1475, 31 USPQ 2d (BNA) 1671, (U.S. App 1994).

The 35 USC §102 rejections over Luthi et al. are traversed because this reference does not disclose and enable all of the elements of the presently claimed contact. In particular, the present contact includes a "support member (21C-Figure 4B) attached to the leads (22C-Figure 4B)". In addition, the "support member (21C-Figure 4B)" is "configured to support and electrically engage the component contact during the movement into the recess".

In Luthi et al. there is no support member attached to multiple leads, which is configured to support and electrically engage a component contact for movement into a recess. Rather, each contact 45 in Luthi et al. includes an end portion 72 (Figure 7) having a raised contact portion 74 (Figure 7). As such, there isn't a single support member having the presently claimed structure and function. In the present contact 14C (Figure 4A), the support member 21C (Figure 4A) is attached to multiple leads 22C (Figure 4A), and each component contact 16 (Figure 3B) is individually supported for movement into a recess 20C, substantially as shown in Figure 3B.

Also in Luthi et al., the central cavity 42 is about the same size as the package 36 (Figure 2). Admittedly, the package 36 (Figure 2) could move into the central

cavity 42 and the contacts 38 (Figure 2) on the package 36 would go with it. However, in the present case, each component contact 16 has an associated recess 20C, which also functions to center and retain the component contact 16.

In order to emphasize this difference, independent claim 77 has been amended to state that the recess is "sized and shaped to center and retain the component contact". Antecedent basis for this recitation is contained on page 10, lines 1-2.

Dependent claims 78-83 have also been amended to emphasize additional features not disclosed or suggest by the prior art.

Dependent claim 78 has been amended to state that the recess has a "has a depth approximately equal to a height of the component contact and the movement into the recess can be an amount approximately equal to the depth". Antecedent basis for this recitation is contained on page 10, lines 9-11 of the specification.

Dependent claim 79 has been amended to state that "the leads are configured to exert a torque on the support member and to twist the projection into the component contact during the movement". Antecedent basis for this recitation is contained on page 13, lines 24-29 of the specification.

Dependent claim 80 has been amended to state the projection comprises "a peripheral blade". Antecedent basis for this recitation is contained on page 14, line 7 of the specification.

Dependent claim 81 has been amended to state that the component contact comprises a "bumped contact having a diameter approximately equal to that of the recess".

Antecedent basis for this recitation is contained on page 10, lines 3-5 of the specification.

Dependent claim 82 has been amended to recite "a conductive via in the substrate in electrical communication with each cantilevered lead". Antecedent basis for this recitation is contained on page 12, lines 17-22 of the specification.

Dependent claim 83 has been amended to state "the leads have scallops and an extensible configuration". Antecedent basis for this recitation is contained on page 14, lines 9-14 of the specification.

In addition to the amendments to claims 77-83, new claims 86-89 have been added. New independent claim 86 recites "extensible" leads "configured to exert a torque on the support member and to twist the projection into the component contact during the movement". As previously argued, this feature is not disclosed or suggested by the prior art.

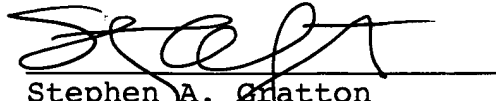
The 35 USC §103 rejection of claim 84 over Luthi et al. is traversed because the combination of Luthi et al. and Malhi et al. does not disclose all of the features of the present contact. As previously argued, independent claim 77 from which claim 80 depends, includes features not disclosed by Luthi et al.

Conclusion

In view of the amendments and arguments, favorable consideration and allowance of claims 77-89 is respectfully requested. An IDS is being filed concurrently with this Amendment. Should any issues remain the Examiner is asked to contact the undersigned by telephone.

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